

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY UTILITIES)	
COMPANY TO ASSESS A SURCHARGE UNDER)	
KRS 278.183 TO RECOVER COSTS OF)	
COMPLIANCE WITH ENVIRONMENTAL)	CASE NO. 93-465
REQUIREMENTS FOR COAL COMBUSTION)	
WASTES AND BY-PRODUCTS)	

O R D E R

On January 20, 1994, Kentucky Utilities Company ("KU") filed an application, pursuant to KRS 278.183, for authority to establish an environmental surcharge to recover its current costs of compliance with the Clean Air Act Amendments of 1990 ("CAAA") and other environmental requirements applicable to coal facilities used to generate electricity. KRS 278.183(2) requires the Commission to: (1) consider and approve a compliance plan and rate surcharge if the Commission finds the plan and rate surcharge reasonable and cost-effective for compliance with the applicable environmental requirements of the CAAA and those federal, state, or local environmental requirements which apply to coal combustion wastes and by-products; (2) establish a reasonable return on compliance-related capital expenditures; and (3) approve the application of the surcharge.

The proposed surcharge is to be implemented in August 1994. KU forecasts that the proposed surcharge will result in current recovery of approximately \$15.5 million of environmental compliance costs in the Kentucky jurisdiction during the 12 months ended July

1995 and \$23 million of current recovery for the 12 months ended July 1996.

The Commission granted motions for full intervention to the Attorney General's Office ("AG"), the Lexington-Fayette Urban County Government ("LFUCG"), the Kentucky Industrial Utility Customers ("KIUC"), Mr. Jerry Hammond, and the Future Fuel & Fiber Farmers of America ("F&FA"). Limited intervention was granted to Mr. Jim Scoggins.

ENVIRONMENTAL SURCHARGE COMPLIANCE PLAN

As required by KRS 278.183, KU filed, as part of its application, an environmental surcharge compliance plan ("surcharge plan") consisting of 15 separate projects to comply with the CAAA or other environmental regulations applicable to coal combustion wastes and by-products. The surcharge plan is divided into two parts: acid rain compliance and other environmental investments.

The CAAA requires, inter alia, substantial reductions in emissions of sulfur dioxide ("SO₂") and nitrogen oxide ("NO_x") and continuous emissions monitoring. Seven of KU's 15 projects are associated with acid rain compliance and represent approximately 60 percent of the total cost of the surcharge plan. The largest of these is the installation of a flue gas desulfurization system ("scrubber") at Unit 1 of the Ghent Generating Station ("Ghent 1"). The remainder consists of other pollution control equipment and investments such as ash pond and precipitator enhancements and compliance with ambient air quality regulations.

To support including the 7 projects in its surcharge plan, KU filed its acid rain compliance plan ("compliance plan").¹ KU's compliance plan is not subject to our approval under KRS 278.183 as it includes CAAA projects not included in KU's surcharge plan. However, our review and approval of the latter necessarily includes the former to the extent that the proposed actions are identical.

KU's compliance plan includes the following actions:

1. Installation of continuous emission monitoring systems at all plants and NO_x burner modifications at all Phase I units.
2. Installation of a scrubber and associated facilities, including a gypsum water recovery treatment facility, at Ghent 1 by 1995.
3. Installation of a scrubber at Ghent 2 by 1998.
4. Switching Ghent 3 and 4 to Western U.S. Powder River Basin coal by 2000.
5. Switching Brown 1, 2 and 3 to compliance coal by 2008.

Of these proposed actions, only Nos. 1 and 2 are included in KU's surcharge plan.

The other eight projects in KU's surcharge plan are for pollution control equipment required by other federal, state or local environmental regulations applicable to coal combustion

¹ Kentucky Utilities Company's Clean Air Act Amendments of 1990 Compliance Plan Reassessment Report ("Reassessment Report"), September 24, 1993, and Clean Air Act Amendments of 1990 Compliance Plan Updated Reassessment Report ("Updated Reassessment Report"), November 1, 1993.

wastes and by-products from power plants. In support of these projects, KU presented testimony and several technical and engineering evaluation studies.

The intervenors' evidence did not address KU's surcharge plan or its compliance plan. However, KIUC contends that KU's compliance plan is deficient because it does not directly consider the implications of Owensboro Municipal Utility ("OMU") adding a scrubber to its Elmer Smith Power Plant ("Smith"). KU purchases power from OMU under a wholesale power contract. KIUC alleges that the addition of the OMU scrubber will cause KU to achieve substantially more emissions reductions than necessary in Phase I because the Ghent 1 scrubber will achieve 80,000 of the 82,000 tons SO₂ reduction required on KU's system. KIUC requests that the Commission's approval of KU's compliance plan be conditional pending final determination of the impact of the OMU scrubber.

KU stated that it has purchase power agreements with OMU, Electric Energy, Inc. ("EEI") and Illinois Power Company ("IPC"). Under the OMU agreement, KU purchases, on an economic basis, all of Smith's 400 MW output not required by OMU. KU presently takes and pays for approximately one-half of the output of Smith. However, this purchase, as well as the EEI and IPC purchases, have no affect on KU's required system reduction of approximately 82,000 tons of SO₂. While the required Phase I SO₂ reductions of OMU, EEI and IPC under the CAAA may affect the prices KU pays for purchased power, these reductions are the responsibilities of those companies, not of KU. The Commission is not persuaded by KIUC's argument and will

not withhold final approval of KU's surcharge plan pending an investigation of the OMU situation.

Based on review of KU's compliance plan, other technical and engineering evaluations and studies, and supporting documentation, the Commission finds that KU's surcharge plan, consisting of 15 projects, is reasonable and cost-effective, and should be approved.

SURCHARGE MECHANISM AND CALCULATION

KU proposed to recover the costs of its surcharge plan through a mechanism defined in its proposed Rate Schedule ES. KU stressed that Rate Schedule ES was based on simplicity, reasonableness, sound rate-making principles, and conservative judgment.² KRS 278.183 provides that a utility may recover those environmental compliance costs that are not already included in existing rates through an environmental surcharge. In its proposal, KU determined what is not currently included in existing rates by using an incremental approach. It identified specific qualifying projects which have been added since its last general rate case and proposed that its return on environmental capital expenditures be determined using an environmental rate base consisting of qualifying assets placed in service after its last rate case. KU also proposed to recover operation and maintenance expenses ("O&M") recorded in five specific subaccounts by determining the incremental change from a 1994 calendar year baseline. It suggested that the six month and two year reviews required by KRS 278.183 be handled in a manner

² KU Brief, at 17.

similar to that used for the Fuel Adjustment Clause ("FAC").³ While KU has stated that revenues received from the sale of emission allowances and scrubber by-products should be treated as cost offsets when determining the surcharge amounts,⁴ it requested a reasonable opportunity to complete an in-house evaluation of the rate-making treatment of these items after which it would file a proposal for review and approval.⁵

The AG argues that without a current rate application under KRS 278.190, it is impossible to determine what environmental costs are included in existing rates.⁶ He further argues that granting KU a surcharge above existing rates which he claims are already fair, just, and reasonable would violate KRS 278.030(1).⁷ The AG also insists that KRS 278.183 cannot be implemented without the promulgation of administrative regulations and that it is unfair to Kentucky jurisdictional customers versus other KU customers.⁸ Finally, the AG argues that KU has failed to meet its burden of proving what is or is not included in existing rates. He recommends that the environmental surcharge be denied. KU

³ Hewett Direct Testimony, at 13-14.

⁴ Response to Items 82 through 84 of KIUC's First Set of Data Requests dated March 4, 1994.

⁵ KU Brief, at 41.

⁶ DeWard Direct Testimony, at 7.

⁷ AG Brief, at 14.

⁸ Id., at 7-8.

responded that the position taken by the AG would make the operation of KRS 278.183 impossible.⁹

KIUC rejected KU's incremental approach as unreasonable and likely to cause gross over-recovery for KU. KIUC proposes to determine the current level of environmental costs and then deduct those environmental costs already recovered by existing rates, with the difference between the total current costs and the amount recovered through existing rates to be recovered as a surcharge.¹⁰ KIUC claims that KU is overcollecting on environmental capital costs included in current rates due to a 50 percent growth in sales, reductions in the cost of pollution control debt, and changes in depreciation rates.¹¹ KIUC calculated a surcharge amount which recognized adjustments for sales growth, debt cost changes, and depreciation rate changes. It based its calculation of environmental costs already recovered on the pollution control bonds included in KU's capitalization in its last rate case. KIUC disagreed with the use of a 1994 calendar year O&M baseline, preferring that KU identify the O&M associated with pollution control property included in the last rate case.¹² KIUC also argued that KU should immediately pass all proceeds from emission allowance auction sales held by the Environmental Protection Agency

⁹ KU Brief, at 26.

¹⁰ Falkenberg Direct Testimony, at 6.

¹¹ KIUC Brief, at 26-27.

¹² Falkenberg Direct Testimony, at 29.

in 1993 and 1994 to ratepayers.¹³ KU challenged KIUC's recommendation as inconsistent with the language of KRS 278.183 and asserted that recognition of changes related to sales growth, debt costs, and depreciation rates was neither reasonable nor consistent with sound rate-making.¹⁴

F&FA, LFUCG, and Mr. Hammond did not present evidence or make arguments.

Surcharge Approach

The Commission is presented with two opposing approaches for determining the eligible environmental costs not included in existing rates. KU's incremental approach identifies environmental costs incurred since its last rate case. KIUC attempted to identify the environmental costs included in KU's last rate case and compare these costs to the current level of environmental costs to determine the surcharge amount.

Both approaches are reasonable methods to determine those costs not included in existing rates. The test year in KU's last general rate case was the twelve months ending June 30, 1982. Using the incremental approach, KU provided the net eligible book values for the 15 environmental projects it proposed to include in the surcharge. The net eligible book values were adjusted to remove any construction work in progress amounts which were included in that case. The accuracy of these book values was not challenged by any intervenor.

¹³ Id., at 30.

¹⁴ KU Brief, at 26-34.

KIUC attempted to determine the environmental capital expenditures being recovered in existing rates by identifying the costs of plant in service as disclosed in pollution control bond documents. KIUC calculated a current level of accumulated depreciation and deferred taxes using those plant costs. KIUC's evidence was that the amounts it included were limited to the amounts that it could identify.¹⁵ KU countered that "it would be most difficult, if not impossible, to go back and try to identify"¹⁶ the amount of environmental revenue requirements included in its last rate case.

Based on the evidence of record, it is reasonable in this instance to use the incremental approach proposed by KU to determine the surcharge for the first two years. This decision recognizes that: (1) KU's incremental approach meets the letter and spirit of KRS 278.183 by charging ratepayers only for current compliance costs not included in KU's last rate case; and (2) the accuracy of KIUC's analysis cannot be verified because it is not supported by detailed cost information from KU's last rate case.

There is no merit in the AG's argument that a current rate application is necessary to determine the costs included in existing rates. First, KRS 278.183 does not require a utility to demonstrate what costs are included in existing rates. Rather, it need only show that the costs to be recovered by the surcharge are

¹⁵ Transcript of Evidence ("T.E."), Vol. II, May 26, 1994, at 400.

¹⁶ Id., at 230.

not included in existing rates. Second, the only costs included in KU's existing rates are those that were found reasonable in its last rate case. KU has demonstrated that the current compliance costs it seeks to recover through the surcharge were not included in its last rate case when its existing rates were established and there is no persuasive evidence to the contrary.¹⁷

Third, KRS 278.183 expressly authorizes the use of a surcharge to recover compliance cost not included in existing rates without the need for a rate application under KRS 278.190. To require a rate application, as the AG suggests, would render KRS 278.183 superfluous because in every instance all reasonable compliance costs would be included in the rate application and recovered through new base rates, leaving nothing to be recovered by a surcharge. There is no reason to believe that the General Assembly intended KRS 278.183 to be a nullity. Rather, it clearly stated that a utility should be entitled to a surcharge as provided for in KRS 278.183 "[n]otwithstanding any other provision of this chapter [KRS 278]." KRS 278.183(1). Thus, the Commission's hands are tied when reviewing such an application.

The traditional analyses of determining whether rates are fair, just, and reasonable simply have no place here. While this

¹⁷ Of course, KU's existing rates have changed since its last rate case due to the biennial roll-in of fuel costs pursuant to 807 KAR 5:056, Section 1(12), and the 1986 Tax Reform Act. However, except for these changes, KU's existing rates are those established in its last rate case, Case No. 8624, General Adjustment of Electric Rates of Kentucky Utilities Company.

procedure may, at first blush, appear to leave ratepayers without recourse in a situation where the utility is already earning a fair return on its investment (or capital), other provisions of KRS Chapter 278 remain available to remedy that situation. Should the Commission or an intervenor believe that KU's earnings from its existing rates are excessive, a proceeding to review those rates can be initiated pursuant to KRS 278.260. Thus, the General Assembly perceived a need to require ratepayers to be charged for all compliance costs not included in existing rates irrespective of the utility's current level of earnings, while leaving available a complete but separate remedy in the event that existing rates produce excessive earnings.

The AG's argument that KRS 278.183 cannot be implemented absent an administrative regulation was earlier argued and was rejected in the Commission's May 6, 1994 Order. KRS 13A.100 specifies that the promulgation of regulations is "[s]ubject to the limitations in applicable statutes." Pursuant to KRS 278.183, each utility is authorized to file its individual compliance plan with the Commission. For example, KU has proposed that Commission staff conduct on-site audits semiannually. Our decision as to the need for audits and, if needed, their frequency, will be based on the evidence in this case. Other utilities filing under KRS 278.183 may believe that their particular circumstances justify more frequent or less frequent audits and will tailor their respective compliance plans accordingly. In each case our decision will be based on the evidence of record in that specific case. The

processing of applications is already governed by existing regulations and the express language of KRS 278.183 belies the claim that more specific regulations are required.

The issue of whether KU's Kentucky ratepayers will be treated unfairly because KRS 278.183 applies to them but not to KU's Virginia ratepayers or wholesale ratepayers is beyond the scope of our jurisdiction. This Commission is empowered only with the authority to regulate KU's rates to Kentucky ratepayers and to enforce the provisions of KRS Chapter 278. It is for other regulatory agencies to determine what is fair and reasonable for Virginia ratepayers and wholesale customers.

Nor has the AG persuaded the Commission that an investigation of the legislative process by which KRS 278.183 was enacted would be appropriate even if it were within the Commission's jurisdiction. There is no evidence that the legislation was not passed by the General Assembly, signed by the Governor, and in full force and effect. If the AG believes that KRS 278.183 was the product of improper influence, the appropriate recourse is to consult with the United States Attorney's Office or the appropriate Commonwealth Attorney's Office.

While KU's incremental approach is acceptable for implementing the surcharge, an environmental compliance rate base should be established for use in the future. The 15 projects approved in this Order, as well as any subsequently approved, should be included. This environmental rate base will be maintained, with appropriate credits for accumulated depreciation, until KU's next

general rate case. At each two year review, the then current annual costs associated with the environmental rate base will be incorporated into KU's base rates. Subsequent calculations of the surcharge will be based upon the then current costs associated with this continuing environmental rate base less the amount incorporated into base rates. At such time as KU files a general rate case, all environmental costs will be identified and a new environmental rate base established.

Qualifying Costs

KU proposed that its Rate Schedule ES include a return on its Environmental Compliance Rate Base ("rate base"), the incremental change in five specific O&M expense subaccounts, and other specific operating expenses related to pollution control capital expenditures. KIUC followed a similar approach in its calculation of an environmental surcharge.

Rate Base. KU's rate base was calculated in a manner similar to the approach used by the Commission in general rate cases. A working capital allowance was included reflecting 1/8th of the annual incremental O&M expenses related to pollution control equipment. Under KU's proposal, the working capital allowance would not appear in the calculations until 1995 because of the proposed use of a 1994 calendar year baseline for O&M expenses. KU initially proposed including the purchase prices of emission allowances which remain in the allowance bank in inventory,¹⁸ but

¹⁸ Willhite Direct Testimony, at 5.

subsequently indicated that all emission allowances would be included in the rate base, at their average inventory price.¹⁹

The rate base proposed by KU should be used to determine the return on environmental capital expenditures, with one modification. The ending inventory of emission allowances should be included using the weighted average cost method required by the Federal Energy Regulatory Commission ("FERC"). Based on the Commission's decision concerning the O&M expense baseline, infra, a working capital allowance will be included beginning the first month the surcharge is billed to ratepayers.

Pollution Control Operating Expenses ("PCOE"). KU identified the following expenses related to pollution control facilities as PCOE in Rate Schedule ES: the monthly incremental change in O&M expenses, monthly depreciation and amortization expenses, monthly property taxes, and its monthly insurance expense. The incremental O&M expenses will reflect the total change in five specific subaccounts designated by KU to track pollution control related O&M. KU proposed the 12 months ending December 31, 1994 as the baseline period for these O&M expenses. It was willing to forgo using an earlier time period²⁰ which would have resulted in higher incremental O&M expenses and proposed this period because it immediately preceded the scheduled operation date for the Ghent 1

¹⁹ Response to Item 49(d) of the Commission's March 4, 1994 Order.

²⁰ Response to Item 40(b) of the Commission's April 6, 1994 Order.

scrubber.²¹ KIUC's calculations of a surcharge utilized this same assumption.²²

The use of the environmental compliance-related expenses identified by KU as PCOE in determining the surcharge should be adopted with three modifications. First, KRS 278.183(4) requires that the cost of any consultant employed by the Commission to assist in reviewing a utility's compliance plan be included in the surcharge. Therefore, this cost should be included in PCOE, with amounts already billed and paid included in the calculation of the first monthly surcharge and subsequent billings recognized in the months as billed. Second, the emission allowance expense, defined as Account No. 509 by FERC, should also be included in PCOE. KU did not include this expense in its proposed Rate Schedule ES, but did include it when determining the impact of the proposed surcharge on ratepayers over its first two years.²³ Finally, the O&M expense baseline should be the 12 months ending May 31, 1994, the period immediately preceding the first expense month to be included in the surcharge. It is not reasonable to define the baseline period as the 12 months immediately before a major pollution control investment becomes operational. Setting the O&M expense baseline as the 12 months ending May 31, 1994 more

²¹ Response to Item 62(a)(1) of the Commission's March 4, 1994 Order.

²² Falkenberg Direct Testimony, Exhibit No. RJF-10.

²³ Willhite Direct Testimony, Exhibit 1 (Proposed Rate Schedule ES) and Exhibit 5, page 2 of 3 (Illustration of Typical Month Surcharge Levels - Pollution Control Operating Expenses).

accurately reflects the period prior to the recovery available through the surcharge than does KU's proposal.

KU did not propose including any environmental compliance-related administrative and general expenses in the O&M expense baseline, having determined these costs to be insignificant when measured as an increment against the baseline.²⁴ The Commission will not require it to do so. KU will be required to provide account descriptions for the five O&M subaccounts to be used in the surcharge. They should be filed with the first surcharge calculation and may not be changed without prior Commission approval. If KU later wishes to include administrative and general expenses in the surcharge, such a request will be considered only at the start of the next 2-year period.

Proceeds from By-Product and Allowance Sales. KU requested that the Commission defer ruling on how the proceeds from by-product and emission allowance sales should be reflected in the surcharge until KU develops "guidelines" for treating these transactions. However, KU recognized the need to address the use of allowance sales to mitigate near-term impacts on rates in the Reassessment Report and the Updated Reassessment Report.²⁵

KU's concern over the proper treatment of proceeds from emission allowance sales is understandable. However, this issue should not be deferred until KU can put forward a proposal. KU has

²⁴ Response to Item 55 of the Commission's March 4, 1994 Order.

²⁵ Reassessment Report at page 2 and Updated Reassessment Report at page 1.

been aware of this issue at least since September 1993 and has yet to produce a proposal for consideration. It has indicated repeatedly that the proceeds from by-product and emission allowance sales should be included in the surcharge calculations as an offset. Therefore, all sales revenues, unadjusted for gains or losses, should be reflected as an offset in the surcharge. Given the treatment of allowances in the rate base and the PCOE, this is the most equitable treatment. Sales of by-products should be treated in the same manner. As suggested by KU, revenues from the EPA's 1993 Auction should be credited to the ratepayers in the first month of the surcharge.²⁶ Subsequent sales revenues should be reflected in the month the revenues are received.

In the Reassessment Report and the Updated Reassessment Report, KU acknowledged the need to develop a strategy which would permit it to hold a prudent number of allowances to meet unexpected needs.²⁷ During the review of its 1993 Integrated Resource Plan, KU described the factors it believed were necessary to develop an allowance management strategy.²⁸ KU should develop and file an Emission Allowance Management Strategy Plan by the time of the first 6-month surcharge review. Changes made in the strategy, with

²⁶ T.E., Vol. I, May 25, 1994, at 154, and KU Brief, at 40.

²⁷ Reassessment Report at page 22 and Updated Reassessment Report at page 11.

²⁸ Response to Item 94 of the Commission Staff's December 14, 1993 Data Request, Case No. 93-382, A Review Pursuant to 807 KAR 5:058 of the 1993 Integrated Resource Plan of Kentucky Utilities Company.

appropriate supporting explanations, may be filed during subsequent 6-month reviews. A complete, updated plan should be filed during the 2-year review. Appendix A of this Order provides an outline for the allowance management strategy plan.

Review and Audit Process

KU has stated that operation of the surcharge should be similar to the FAC. It included as part of its surcharge application a series of reporting formats for the monthly surcharge calculation which is acceptable, with some modifications. The revised formats are attached to this Order as Appendix B, which includes formats for information to be filed at the time of the 6-month and 2-year reviews. The information in the monthly formats should be filed when KU submits the amount of the monthly surcharge. As experience is gained in the monthly reporting and review processes, the Commission may modify these formats or prescribe additional formats. A form to be prepared by KU when it proposes to include a new capital investment in the surcharge has also been included.

The 6-month and 2-year reviews will be conducted in formal proceedings initiated by the Commission. Although KU has suggested that the Commission Staff perform on-site audits every 6 months, the Commission will have its Staff perform on-site audits as deemed necessary. The Commission accepts KU's proposal to calculate an over- or under-recovery cost factor during the 6-month review, beginning with the first month of the 6-month expense period following Commission approval.

Formula to Calculate the Surcharge

The formula to calculate the surcharge gross revenue requirement, as modified by this Order, is as follows:

$$E(m) = (RB/12)[ROR + (ROR - DR)(TR/(1 - TR))] + PCOE - BAS$$

Where:

E(m)	=	Environmental Surcharge Gross Revenue Requirement
RB	=	Environmental Compliance Rate Base
ROR	=	Rate of Return on Environmental Compliance Rate Base
DR	=	Pollution Control Bond Rate
TR	=	Composite Federal and State Income Tax Rate
PCOE	=	Pollution Control Operating Expenses [Incremental O&M Expenses (+/-), Depreciation and Amortization Expense, Property Taxes, Insurance Expense, Emission Allowance Expense, and Surcharge Consultant Fee]
BAS	=	Gross Proceeds from By-Product and Allowance Sales

E(m) is divided by the Average Monthly Revenue for the 12 Months Ending with the Current Expense Month R(m) which results in an Environmental Surcharge Factor.

RATE OF RETURN

KU proposed a rate of return of 5.85 percent as an interim rate for the limited purpose of this case. The rate is based on the actual cost of KU's last pollution control bond issue in December 1993. No other party proposed an alternative return. KU qualified this rate as interim, stating that after its next general rate case the return should be that authorized in the rate case. KRS 278.183 does not provide for an interim return, only a reasonable return. The Commission, having considered the evidence presented in this case, finds a return of 5.85 percent reasonable.

SURCHARGE ALLOCATION

KU proposes to calculate the surcharge as a percentage of total revenues which will then be applied to customers' bills. In this manner, all customers will receive equal percentage increases to their monthly electric bills. This method ensures that all customer classes are charged a proportionate share of the costs of environmental compliance. One of KU's stated goals in developing the proposed surcharge was to avoid significant changes in the allocation of costs reflected in existing rates. As its current rates, and the resulting revenues, reflect existing cost allocations, KU contends that its production cost analysis supports allocating the surcharge amounts based on revenues. It further states that its proposal will be better understood by customers, simpler to administer, and more easily monitored by the Commission.

The AG argues that a cost-of-service study is needed to allocate surcharge revenues between customer classes. Absent such a study, the AG recommends that demand and energy allocators it developed for each of the 15 construction projects included in KU's surcharge plan be used to assign the surcharge amounts to the customer classes. The AG contends that the energy allocator should be used for Ghent 1 scrubber costs, which account for the majority of the projected surcharge costs, because: (1) the use of the allocator is consistent with alternative, energy-driven compliance strategies; (2) the cost of the scrubber would be allocated in a cost-of-service study based on average demand, a surrogate for an energy allocator; and (3) the scrubber will reduce fuel costs and

its costs should be allocated in the same manner as fuel costs would be allocated. The AG's proposal would result in a reduced allocation of costs to the residential class.

KIUC recommends allocating surcharge amounts following historic Commission practice and established cost-of-service principles. KIUC maintains that the cost of a scrubber does not vary with the energy output of the generating unit and therefore should not be allocated based on energy. Rather, it argues that the capital costs of pollution control equipment are demand-related and should be allocated based on demand. As a surrogate for a demand-based cost-of-service allocation, KIUC recommends a percentage of revenues approach calculated using non-fuel revenues rather than total revenues. KIUC's approach would result in a reduced allocation of costs to the industrial class.

In a limited proceeding such as this, the allocation of costs reflected in existing rates should be maintained absent a compelling argument to the contrary. The intervenors argued for an allocation based on cost-of-service principles but did not present compelling arguments for departing from the existing allocation of costs nor did they file cost-of-service studies to support their positions. The Commission has frequently used a percentage of revenues method to maintain the allocation of costs reflected in existing rates absent a cost-of-service study or when those filed have been rejected. KU's approach achieves this result and is consistent with its production cost analysis, the results of which were not refuted by any party. Furthermore, KU's proposal would in

fact be simpler to administer, better understood by customers, and more easily monitored by the Commission.

IT IS THEREFORE ORDERED that:

1. KU's surcharge plan, consisting of 15 projects to meet federal, state and local environmental regulations is approved.

2. KU's Rate Schedule ES is approved as modified herein for service rendered on and after July 20, 1994.

3. KU's proposed Rate Schedule ES is denied.

4. KU shall develop an Emission Allowance Management Strategy Plan as outlined in Appendix A. The plan shall be filed at the time of the first 6-month review, with changes reported at each subsequent 6-month review, and a full updated plan filed during each 2-year review.

5. KU's rate of return of 5.85 percent for the environmental surcharge is approved.

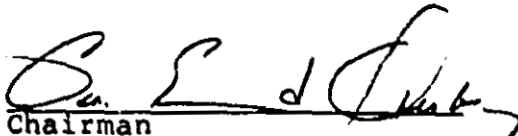
6. KU's percentage of revenue allocation method is approved.

7. The reporting formats included in Appendix B shall be used, as specified therein, for each monthly filing, 6-month review, 2-year review, and new pollution control capital investments.

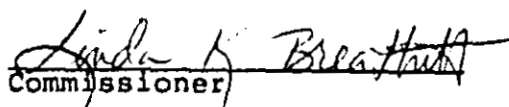
8. Within 10 days of the date of this Order, KU shall file with the Commission revised tariff sheets setting out the Rate Schedule ES as approved herein.

Done at Frankfort, Kentucky, this 19th day of July, 1994.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:


Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION
IN CASE NO. 93-465 DATED July 19, 1994.

EMISSION ALLOWANCE MANAGEMENT STRATEGY PLAN Suggested Format

1. Introduction - Presents the compliance plan that identifies the currently assumed allowance inventory and the objectives of managing allowances.

2. Allowance Management Strategy - Analyzes KU's available alternatives and presents the currently assumed allowance inventory.

3. Contingency Reserve - Discusses KU's potential need for an allowance contingency reserve which would be required to ensure adequate allowances exist to cover unanticipated events that would increase emissions.

4. Allowance Management Plan - Presents an allowance plan that guides future allowance related activities in accordance with KU's overall allowance strategy and objectives.

5. Implementation Plan - Discusses the activities planned over the next 12 months to implement the allowance strategy and management plan.

At a minimum, the emission allowance management strategy plan should address the following issues. This listing is not intended to be all inclusive.

- Objectives for strategy (i.e., balance costs and risk, maintain flexibility to respond to market development, provide adequate contingency reserve.)
- Forecast of emission allowance balances and role of emission allowances in the broader acid rain compliance plan.
- Forecasts of emission allowance prices.
- Understanding of current market prices and activity.
- Understanding of allowance market mechanisms (i.e., auctions, private trades.)
- Analysis of alternative strategies (banking, sales, portfolio approaches.)
- Development of appropriate contingency reserve levels.

- Valuation of emission allowances for planning (i.e., economy energy pricing, power plant dispatch.)
- Internal organization issues (assignment of allowance management responsibilities.)
- Tracking and reporting.

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION
IN CASE NO. 93-465 DATED July 19, 1994.

INDEX OF REPORTING FORMATS FOR THE KENTUCKY UTILITIES COMPANY ENVIRONMENTAL SURCHARGE [Monthly, 6-Month Review, 2-Year Review, and Future Projects]

Monthly Reporting Formats:

ES Form 1.0	Calculation of E(m) and Environmental Surcharge Factor
ES Form 2.0	Revenue Requirements of Environmental Compliance Costs
ES Form 2.1	Plant, CWIP & Depreciation Expense
ES Form 2.2	Inventory of Spare Parts & Limestone
ES Form 2.3	Inventory of Emission Allowances
ES Form 2.4	Calculation of Incremental O&M Expenses and Determination of Working Capital Allowance
ES Form 2.5	Pollution Control Operating & Maintenance Expenses
ES Form 3.0	Monthly Average Revenue Computation R(m)

Six-Month and 2-Year Review Formats:

ES Form 4.0	Recap of Billing Factors and Revenue
ES Form 4.1	Recap of Environmental Compliance Rate Base
ES Form 4.2	Recap of Pollution Control Operating Expenses

Future Projects:

ES Project	New Pollution Control Capital Investments [To be completed only when proposing an additional capital investment for inclusion in the surcharge.]
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KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL SURCHARGE REPORT
CALCULATION OF E(m) AND ENVIRONMENTAL SURCHARGE FACTOR
 For the Expense Month of _____

CALCULATION OF E(m)

$$E(m) = (RB/12)[ROR + (ROR - DR)(TR/(1 - TR))] + PCOE - BAS$$

Where:

E(m) = Environmental Surcharge Gross Revenue Requirement
 RB = Environmental Compliance Rate Base
 ROR = Rate of Return on Environmental Compliance Rate Base
 DR = Pollution Control Bond Rate
 TR = Composite Federal & State Income Tax Rate
 PCOE = Pollution Control Operating Expenses
 BAS = Gross Proceeds from By-Product and Allowance Sales

RB	= \$
RB/12	= \$
[ROR + (ROR - DR)(TR/(1 - TR))]	=
PCOE	= \$
BAS	= \$
E(m)	= \$

CALCULATION OF ENVIRONMENTAL SURCHARGE FACTOR

E(m): Environmental Surcharge Gross
 Revenue Requirement = \$

R(m): Average Monthly Revenue for the
 12 Months Ending with the
 Current Expense Month = \$

Environmental Surcharge Factor: $E(m)/R(m)$ =
 (% of Revenue)

Effective Date for Billing: _____

Submitted By: _____

Title: _____

Date Submitted: _____

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL SURCHARGE REPORT
REVENUE REQUIREMENTS OF ENVIRONMENTAL COMPLIANCE COSTS
For the Expense Month of _____

DETERMINATION OF ENVIRONMENTAL COMPLIANCE RATE BASE

Eligible Pollution Control Plant	\$
Eligible Pollution Control CWIP Excluding AFUDC	\$
Subtotal	\$
Additions:	
Inventory - Spare Parts	\$
Inventory - Limestone	\$
Inventory - Emission Allowances	\$
Pollution Control Working Capital	\$
Subtotal	\$
Deductions:	
Accumulated Depreciation on Eligible Pollution Control Plant	\$
Pollution Control Deferred Income Taxes	\$
Pollution Control Deferred Investment Tax Credit	\$
Subtotal	\$
Environmental Compliance Rate Base	\$

DETERMINATION OF POLLUTION CONTROL OPERATING EXPENSES

Monthly Incremental Operation & Maintenance Expense (+/-)	\$
Depreciation & Amortization Expense for Month	\$
Taxes Other Than Income for Month	\$
Insurance Expense for Month	\$
Emission Allowance Expense	\$
Surcharge Consultant Fee for Month	\$
Total Pollution Control Operating Expenses	\$

PROCEEDS FROM ALLOWANCE SALES DURING MONTH

Allocated Allowances from EPA	Allowances from Over-Control	Allowances from Purchases	Total Proceeds from Allowance Sales
\$	\$	\$	\$

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL BURCHARGE - PLANT, CWIP & DEPRECIATION EXPENSE
For the Month Ended _____

Project Description	Plant in Service Balance	Exclude Charges Prior to 06/30/82	Eligible Plant Amounts	Eligible Accum. Deprec.	Eligible Net Plant in Service	CWIP Amount Excluding AFUDC	Eligible Net Book Value	Monthly Date Deprec. Expense
Scrubber								
Gypsum Stacker								
Flue Gas Dispersion								
Emission Monitors								
EWB1 & 3 - Burner Modification								
EWB2, GH1 & GR4 - Burner Modification								
Ash Pond Elevation								
New Ash Storage								
Precipitator & Ash Handling								
Ash Pond Filtration System								
Precipitator - All Plants								
Precipitator - Ghent 1								
Precipitator - Brown 1								
Dry Fly Ash Handling								
Dust Elimination System								
Totals								

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL SURCHARGE - INVENTORIES OF SPARE PARTS & LIMESTONE
For the Month Ended _____

	Beginning Inventory	Purchases	Utilized	Other Adjustments	Ending Inventory	Reason(s) for Adjustments
Spare Parts						
Green River						
E. W. Brown						
Ghent						
Tyrone						
Pineville						
Limestone						
At Ghent:						
Tons						
Dollars						
\$/Ton						
At Green River:						
Tons						
Dollars						
\$/Ton						

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL SURCHARGE - INVENTORY OF EMISSION ALLOWANCES
For the Month Ended _____

	Beginning Inventory	Allocations/ Purchases	Utilized	Hold	Ending Inventory	Allocation, Purchase or Sale Date & Vintage Years
TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS:						
Quantity						
Dollars						
\$/Allowance						
ALLOCATED ALLOWANCES FROM EPA:						
Quantity						
ALLOWANCES FROM OVER-CONTROL (OVER-SCRUBBING):						
Quantity						
ALLOWANCES FROM PURCHASES:						
Quantity						
Dollars						
\$/Allowance						
KU is required to maintain adequate allowance records which will allow ready identification of the number of each classification of allowances included in Ending Inventory.						

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL SURCHARGE
CALCULATION OF INCREMENTAL O&M EXPENSES AND DETERMINATION OF WORKING CAPITAL ALLOWANCE
For the Month Ended _____

Incremental O&M Expenses		Determination of Working Capital Allowance	
11th Previous Month		12 Month Incremental O&M Expenses to be Included in Working Capital Allowance	
10th Previous Month			
9th Previous Month			
8th Previous Month			
7th Previous Month		One eighth (1/8) of 12 Month Incremental O&M Expenses	
6th Previous Month			
5th Previous Month		Pollution Control Working Capital Allowance	
4th Previous Month			
3rd Previous Month			
2nd Previous Month			
Previous Month			
Current Month			
Total 12 Month O&M			
Less Baseline (12 Months Ended 05/31/94)			
12 Month Incremental O&M			
Monthly Incremental O&M			
		<p>Notes:</p> <p>The Monthly Incremental O&M is obtained by dividing the 12 Month Incremental O&M by 12. The resulting amount is to be recorded as a (+) or (-) on ES Form 2.0 under "Determination of Pollution Control Operating Expenses."</p>	

Instructions:

At the time of KU's first surcharge filing, a ES Form 2.5 is to be prepared for each month shown for the twelve month period ending with the current expense month.

At the time of KU's first surcharge filing, provide a ES Form 2.5 which shows the amounts for each subaccount listed for the twelve months ending May 31, 1994.

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL SURCHARGE
POLLUTION CONTROL OPERATING & MAINTENANCE EXPENSES
For the Month Ended _____

Pollution Control Operating and Maintenance Expenses	Green River	E. W. Brown	Ghent	Tyrone	Pineville	Current Month Total
50205PC - Scrubber Operation						
51209PC - Scrubber Maintenance						
51207PC - Ash Handling - Maintenance						
50605PC - CEMS & Precipitators Operation						
51208PC - CEMS & Precipitators Maintenance						
Total PC O&M Expense						

Instructions:

At the time of KU's first surcharge filing, prepare a separate ES Form 2.5 for each month included in the twelve month period ending with the current expense month.

At the time of KU's first surcharge filing, provide an account description for each of the listed subaccounts.

In any month where significant changes occur in the five subaccount expense levels, attach to this form an explanation of the reason(s) for the change.

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL SURCHARGE - MONTHLY AVERAGE REVENUE COMPUTATION R(m)
For the Month Ended _____

	Kentucky Jurisdictional Revenue					Non Juris- dictional	Total Company	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Month	Base Revenues	Fuel Clause Revenues	Environ- mental Surcharge	Total (2)+(3)+(4)	Total Excluding Environ. Surcharge (5)-(4)	Total	Total (5)+(7)	Total Excluding Environ. Surcharge (8)-(4)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
Month Average of Total Company Revenues Excluding Environmental Surcharge, For 12 Months Ending _____								

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL SURCHARGE
SIX MONTH AND TWO YEAR REVIEW
RECAP OF BILLING FACTORS AND REVENUE
For the Period _____ through _____

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Current Expense Month	E(m) Gross Environ. Surcharge Revenue Requirement (Note 1)	Total Company Revenue (Incl. FAC Excl. ES)	Environ. Surcharge Billing Factor (Note 2)	Net Six Month & Environ. Surcharge Billing Factor (Note 3)	KY Retail Juris. Revenue (Incl. FAC Excl. ES)	Environ. Surcharge Revenue (Note 4)	KY Juris. Over/ (Under) Collection (Note 5)	Total Company Over/ (Under) Collection (Note 6)

For each Expense Month included in the 6 Month Review Period, list the appropriate billing factors and revenues. At the 2 Year Review, provide this information for the entire review period.

Note 1: $E(m) = (RB/12)[ROR + (ROR - DR)(TR/(1 - TR))] + PCOE - BAS$

Note 2: 2nd previous month Column 2 / 2nd previous month Column 3

Note 3: Net of the month's Environmental Surcharge Factor and the appropriate Over/(Under) Collection adjustment. Show the calculation of the Over/(Under) Collection adjustment on a separately attached worksheet.

Note 4: Column 5 times Column 6

Note 5: Column 5 times (current less 2nd previous month Column 6)

Note 6: (Column 8 times Column 3) / Column 6. Converts Over/(Under) Collection to Total Company Level.

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL SURCHARGE
SIX MONTH AND TWO YEAR REVIEW
RECAP OF ENVIRONMENTAL COMPLIANCE RATE BASE
For the Period _____ through _____

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Additions		Deductions			
Current Expense Month	Eligible Pollution Control Plant	Eligible Pollution Control CWIP Excluding AFUDC	Inventories; Spare Parts, Limestone & Emission Allowances	Pollution Control Working Capital Allowance	Accumulated Depreciation on Eligible Pollution Control Plant	Pollution Control Deferred Income Taxes	Pollution Control Deferred Investment Tax Credits	Environ- mental Compliance Rate Base (Col. (2)+ (3)+(4)+(5) -(6)-(7)- (8)

For each Expense Month included in the 6 Month Review Period, list the appropriate components of the Environmental Compliance Rate Base.

At the 2 Year Review, provide this information for the entire review period.

KENTUCKY UTILITIES COMPANY - ENVIRONMENTAL BURCHARGE
SIX MONTH AND TWO YEAR REVIEW
RECAP OF POLLUTION CONTROL OPERATING EXPENSES
For the Period _____ through _____

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Current Expense Month	Incremental Operation & Maintenance Expenses (+ or -)	Depreciation and Amortization Expense	Insurance Expense	Property Tax Expense	Emission Allowance Expenses	Surcharge Consultant Fee	Total Pollution Control Operating Expenses (Col. 2 thru 7)

For each Expense Month included in the 6 Month Review Period, list the appropriate components of the Pollution Control Operating Expenses.
At the 2 Year Review, provide this information for the entire review period.

KENTUCKY UTILITIES COMPANY
NEW POLLUTION CONTROL CAPITAL INVESTMENTS

PROJECT TITLE and DESCRIPTION:	
Dollar Amount of Project [Designate as Actual (A) or Estimated (E)]	
List Applicable Environmental Regulation(s)	
List Applicable Environmental Permit(s)	
Indicate Construction Schedule [Designate as Actual (A) or Estimated (E)]	
Indicate Pollutant or Waste By-Product to be Controlled by Project	
Designate the Affected Generating Station and the Control Facility	
List All Internal Engineering or Economic Studies Completed in Support of the Project [KU should be prepared to provide access to any listed study if so requested]	
Identify the Management Authority who Approved the Project	
List any Internal Work Order Numbers Applicable to the Project	

A separate form is to be completed for each proposed project.
Attach additional sheets as necessary.

Submitted By:

Title:

Date Submitted:
